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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/740,016	12/18/2003	Paul J.G. Van Wulfften Palthe	68.0382	1737

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SCHLUMBERGER RESERVOIR COMPLETIONS  
14910 AIRLINE ROAD  
ROSHARON, TX 77583

EXAMINER

COY, NICOLE A

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/740,016	<b>Applicant(s)</b> VAN WULFFTEN PALTHE, PAUL J.G.	
	<b>Examiner</b> Nicole Coy	<b>Art Unit</b> 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35 is/are allowed.
- 6) ☒ Claim(s) 1-18, 29-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al. (USP 5,329,998).

With respect to claim 1, King et al. discloses a one-trip system for use in a subterranean well comprising: a unit adapted to be run downhole into the well in a single trip (see column 2 lines 40-44), the unit comprising: a tubing hanger (76) adapted to be mounted to one of the well and a well casing near the earth's surface; a production tubing (40) sealingly attached to the tubing hanger (76) and adapted to receive a continuous medium riglessly deployed from the earth's surface (wherein the production tubing is capable of receiving continuous medium riglessly deployed from the surface); a perforating gun assembly (58) coupled to the production tubing (40); and a screen assembly (24) adapted to be engaged by the continuous medium to cause the release and movement of the screen assembly relative to the production tubing (wherein the adapted limitation is functional and the assembly of King et al. is capable of being moved relative to the production tubing).

With respect to claim 2, King et al. discloses a packer (26) attached to a lower end of the production tubing (see figure 3C).

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With respect to claim 4, King et al. discloses a surface-controlled subsurface valve (70) located in-line with the production tubing

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Strattan et al. (USP 5,211,243).

King et al. does not disclose a valve located near the earth's surface and mounted about the tubing hanger to control flow of well fluids. Strattan et al. teaches the use of an annular safety valve (100) that can be run into the well in one trip along with other equipment, and suggests that a surface mounted valve is useful in order to prevent blow out in the event of an uncontrollable situation. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion system of King et al. to include the safety valve of Strattan et al. in order to prevent blow out and increase the level of safety during well operations.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Ringgenburg et al. (USP 5,875,852).

King et al. does not teach an artificial lift device to assist in the production of well fluids; the artificial lift device being an electric submersible pump. Ringgenburg et al. teaches the use of an electric submersible pump in a well completion system, and suggests that a pump is needed to draw fluid from the formation. See figure 2 column 9 lines 52-54. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion apparatus of King et al. to include the electric submersible pump of Ringgenburg et al. in order to draw fluid from the formation when well pressure is low.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Achee et al. (USP 6,216,785).

With respect to claim 7, King et al. does not disclose an upper sliding sleeve valve mounted in-line with the production tubing above the packer. Achee et al. discloses an upper sliding sleeve valve mounted above a packer (see column 6 lines 40-67) for flow control. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify King et al. by including a sliding sleeve valve above a packer as taught by Achee, Jr. et al. in order to control flow in the assembly.

With respect to claim 8, King et al. does not disclose an extension having an intermediate sliding sleeve valve mounted below the packer (see column 2 lines 27-28). Achee, Jr. et al. discloses a sliding sleeve valve mounted below the packer (see column 2 lines 27-28) for flow control. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify King et al. by including a sliding sleeve

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valve below a packer as taught by Achee, Jr. et al. in order to control flow in the assembly.

7. Claims 9-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Gano et al. (USP 6,382,323).

With regard to claims 9-15, 17, and 18, King et al. discloses the apparatus as applied to the claims above having a perforating assembly that includes a perforating gun (66), a firing head (see column 7 lines 7-11), a safety spacer (see figure 2C), a sand exclusion device with a sand screen (54), and an inner string (48) releasably mounted within the interior of the lower completion assembly, but does not teach a selective nipple; a shroud attached to the selective nipple; a no-go nipple mounted to the shroud; the perforating assembly mounted below the no-go nipple; a lock to keep the inner string secured to the selective nipple; a lower sliding sleeve valve; and a configuration in which the inner string can be moved from a first configuration of being mounted to the selective nipple to a second configuration in which it is mounted to the no-go nipple. Gano et al. discloses a releasable no-go tool having selective nipple (42), a shroud attached to the selective nipple, a no-go nipple (40) mounted to the shroud (44), a lock (48) to keep the inner string (20) secured to the nipple; and a perforating assembly (24) mounted below the no-go nipple; a lower sliding sleeve valve (54), in which the perforating assembly could be moved from the selective nipple to the no-go structure. Gano et al. suggest that a releasable no-go tool is useful in order to accurately position an item of equipment used in wellbore operations.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion assembly King et al. to include the releasable no-go tool of Gano et al. in order to maintain the proper orientation of the tool during perforating and fracturing operations.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Gano et al. (USP 6,382,323) in further view of Donnelly et al. (USP 5,901,789).

King et al. in view of Gano et al. does not teach the use of a sand exclusion device with an expandable element. Donnelly et al. discloses such a device and suggests that an expandable element is useful to ensure a continuous mechanical contact between the screen and formation where there are inconsistencies in wellbore geometry. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the apparatus of the combined references of King et al. and Gano et al. to incorporate the expandable sand exclusion element of Donnelly et al. in order to further prevent the migration of solid particles into a hydrocarbon wellbore.

9. Claims 9-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Shy (USP 6,199,632).

With regard to claims 9-15, 17 and 18, King et al. discloses the apparatus as applied to the claims above with the lower completion assembly having a perforating

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assembly that includes a perforating gun (66), a firing head (see column 7 lines 7-11), a safety spacer (see figure 2C), a sand exclusion device with a sand screen (54), and an inner string (48) releasably mounted within the interior of the lower completion assembly, but fails to teach a selective nipple attached to a lower end of the upper completion assembly; a shroud attached to the selective nipple; a no-go nipple mounted to the shroud; the perforating assembly mounted below the no-go nipple; a lock to keep the inner string secured to the selective nipple; a lower sliding sleeve valve; and a configuration in which the inner string can be moved from a first configuration of being mounted to the selective nipple to a second configuration in which it is mounted to the no-go nipple. Shy discloses a perforating apparatus having a selective nipple (38), a shroud attached to the selective nipple, a no-go nipple (74) mounted to the shroud; a lock (50) to keep the inner string (48) secured to the nipple; a perforating assembly mounted above the no-go nipple; a lower sliding sleeve valve (60); and a configuration in which the inner string can be moved from being mounted at the nipple to being mounted at the no-go nipple. Shy does not show the perforating assembly mounted below the no-go nipple. It is an obvious design choice to reverse the configurations to modify the design. (Shy column 12 lines 45-48). Shy suggests that the configuration of components is useful in single trip perforation and fracturing operations to ensure proper alignment of the tool both in an axial and circumferential orientation. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the completion system of King et al. to include the locating nipples of Shy in order to maintain the proper orientation of the tool during perforating and fracturing operations.



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Absent a showing of criticality in the location of the perforating gun in relation to the no-go nipple, the Shy reference meets the limitations of the claims.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. in view of Shy in further view of Donnelly et al.

The combined reference of King et al. and Shy teaches the apparatus as applied to the claims above, but fails to teach the use of an sand exclusion device with an expandable element. Donnelly et al. discloses such a device and suggest that an expandable element is useful to ensure a continuous mechanical contact between the screen and formation where there are inconsistencies in wellbore geometry. Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the apparatus of the combined references of King et al. and Shy to incorporate the expandable sand exclusion element of Donnelly et al. in order to further prevent the migration of solid particles into a hydrocarbon wellbore.

11. Claims 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund (USP 6,675,893).

With respect to claim 29, Lund discloses a method to complete a subterranean well in one trip comprising: providing a one-trip completion system (see abstract) including at least a perforating gun and a production tubing (see column 2 lines 7-12, wherein Lund teaches that it is well known to convey a perforating gun and a production tubing into the well together. It would have been obvious to one having ordinary skill in

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the art at the time of the invention to modify Lund by conveying the perforating gun and the production tubing in one trip in order to save time and money.); running the one-trip completion system into the well in a single trip using a rig (see column 14 lines 8-16); removing the rig (see column 14 lines 8-16); after the removal of the rig, running a continuous medium downhole into the one-trip completion system (see column 14 lines 1-16); and actuating and operating the one-trip completion system using the continuous medium (see column 5 lines 1-30).

Lund teaches activating and operating the one trip completion system using a wireline. See column 5 lines 1-30. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used coiled tubing, since the examiner takes Official Notice of the equivalence of a wireline and coiled tubing for their use in the continuous medium art and the selection of any of these known equivalents to activate and operate a one-trip completion system would be within the level of ordinary skill in the art. Furthermore, wireline and coiled tubing are considered equivalents as indicated by original claim 30.

With respect to claim 31, Lund discloses that the actuating and operating includes performing a gravel pack operation (see column 14 lines 3-5).

With respect to claim 32, Lund discloses that the actuating and operating includes performing a fracturing operation (see column 14 lines 63-67).

With respect to claim 33, Lund discloses that the actuating and operating includes performing a perforating operation (see column 14 lines 1-2).

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With respect to claim 34, Lund discloses that the actuating and operating includes moving a sand exclusion device to a position adjacent perforations in a well casing (see column 4 line 54 to column 5 line 30, wherein filter 32 is a screen which comprises valve 55, which is moved by a wireline).

***Allowable Subject Matter***

11. Claim 35 is allowed.

***Response to Arguments***

12. Applicant's arguments filed 9/19/06 have been fully considered but they are not persuasive.

With respect to claim 1, the Applicant argues that King fails to disclose a screen assembly adapted to be engaged by a continuous medium to cause the release and movement of the screen assembly relative to the production tubing. However, the screen is King is capable of being engaged by a continuous medium, and thus reads on the claimed recitation. Furthermore, it has been held that the recitation that an element is "adapted to" perform or is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. Applicant also points out that the "adapted to" language does not indicate an optional feature of the screen assembly but instead limits the screen assembly to a structure that is to be engaged by a continuous medium to cause the release and movement of the screen assembly relative to a production tubing. However, the "adapted to" language limits the screen assembly to a structure

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*capable of* being engaged by a continuous medium to cause the release and movement of the screen assembly. In this case, it is the Examiner's position that the screen assembly in King is capable of being engaged by a continuous medium.

With respect to claim 29, the applicant argues that Lund fails to disclose providing a one-trip completion system that includes at least a perforating gun and a production tubing. However, as noted above, Lund does disclose that one trip completion systems with production tubing and perforating guns are known in the art and as noted above it would have been obvious to one having ordinary skill in the art to modify Lund.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is 571-272-5405. The examiner can normally be reached on M-F 7:30-5:00, 1st F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nac

  
Nicole Coy  
Examiner